



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,461	03/05/2004	Cheng-Chieh Huang	ALIP0035USA	2460
27765	7590	10/11/2007	EXAMINER	
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION			JONES, HEATHER RAE	
P.O. BOX 506				
MERRIFIELD, VA 22116				
			ART UNIT	PAPER NUMBER
			2621	
			NOTIFICATION DATE	DELIVERY MODE
			10/11/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

winstonhsu.uspto@gmail.com
Patent.admin.uspto.Rcv@naipo.com
mis.ap.uspto@naipo.com.tw

Office Action Summary	Application No. 10/708,461	Applicant(s) HUANG, CHENG-CHIEH	
	Examiner Heather R. Jones	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-11, 13-16 and 18 is/are rejected.
- 7) ☒ Claim(s) 5, 12 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 6, 7, 9, 14, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Archer et al. (U.S. Patent 5,473,229).

Regarding claim 1, Archer et al. discloses an output circuit comprising: an output port electrically connected to an output cable in a detachable manner; a signal circuit electrically connected to the output port for providing a signal current to the output port; and a decision module electrically connected to the output port for determining whether the output port is electrically connected to the output cable according to a signal voltage of the output port (abstract).

Regarding claim 2, Archer et al. discloses all the limitations as previously discussed with respect to claim 1 including that the decision module comprises a comparator for comparing whether the signal voltage of the output port is larger than a predetermined signal threshold and the comparison result of the comparator determines whether the output port is electrically connected to the output cable (abstract).

Regarding claims 6 and 7, these are method claims corresponding to the apparatus claims 1 and 2. Therefore, claims 6 and 7 are analyzed and rejected as previously discussed with respect to claims 1 and 2.

Regarding claim 9, Archer et al. discloses all the limitations as previously discussed with respect to claim 6 as well as the apparatus further comprising providing a detecting signal to the output port when it is determined that the output port is not electrically connected to the output cable, the detecting signal having non-zero average power (col. 10, lines 36-41 – the detecting signal has to have a non-zero average power in order to detect signal changes).

Regarding claims 14 and 15, these are claims directed to a displaying device corresponding to the apparatus claims 1 and 2. Therefore, claims 14 and 15 are analyzed and rejected as previously discussed with respect to claims 1 and 2.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 3, 4, 8, 10, 11, 13, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Archer et al. as previously applied to claims 1, 2, 6, and 7.

Regarding claim 3, Archer et al. discloses all the limitations previously discussed with respect to claims 1 and 2, but fails to disclose that the decision module determines that the output port is not electrically connected to the output cable if the signal voltage of the output port is larger than the signal threshold. However, Archer et al. discloses that when the output port is not electrically connected to the output cable the signal voltage of the output port is smaller than the signal threshold (col. 10, lines 15-35). Official Notice is taken that the threshold voltage and comparator can be changed to determine that the output port is not electrically connected to the output cable if the signal voltage of the output port is larger than the signal threshold. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the threshold smaller than the output voltage when the cable is not detected based on the design choice.

Regarding claim 4, Archer et al. discloses all the limitations previously discussed with respect to claims 1 and 2, but fails to disclose that the decision module determines that the output port is not electrically connected to the output cable if the signal voltage of the output port is larger than the signal threshold. However, Archer et al. discloses that when the output port is not electrically connected to the output cable the signal voltage of the output port is smaller than the signal threshold (col. 10, lines 15-35). Official Notice is taken that the threshold voltage and comparator can be changed to determine that the output port is not electrically connected to the output cable if the signal voltage of the

output port is larger than the signal threshold. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the threshold smaller than the output voltage when the cable is not detected based on the design choice. Furthermore, once it is determined that the cable is not connected the apparatus will keep checking to see if the cable is reconnected (col. 7, lines 17-21 – integrity check).

Regarding claim **8**, this is a method claim corresponding to the apparatus claim 3. Therefore, claim 8 is analyzed and rejected as previously discussed with respect to claim 3.

Regarding claim **10**, this is a method claim corresponding to the apparatus claim 4. Therefore, claim 10 is analyzed and rejected as previously discussed with respect to claim 4.

Regarding claim **11**, Archer et al. discloses all the limitations previously discussed with respect to claims 6, 9, and 10 including that it is determined that the output port is not electrically re-connected to a output cable when the signal voltage of the output port is less than the detecting threshold (col. 10, lines 15-35).

Regarding claim **13**, Archer et al. discloses all the limitations previously discussed with respect to claims 6, 9, and 10 including that the method further comprises providing an output signal to the output port when it is determined that the output port is electrically re-connected to an output cable, and comparing whether the signal voltage of the output port is larger than a predetermined

Art Unit: 2621

detecting threshold, then determining whether the output port is electrically connected to the output cable according to the comparison result (col. 7, lines 17-21 – integrity check; col. 10, lines 15-35).

Regarding claim **16**, this is a claim directed to a displaying device corresponding to the apparatus claim 4. Therefore, claim 16 is analyzed and rejected as previously discussed with respect to claim 4.

Regarding claim **18**, Archer et al. discloses all the limitations previously discussed with respect to claims 14 and 16, but fails to disclose a storing circuit for providing a data signal and reading the data on an optical disc to generate the data signal. However, Archer et al. discloses a personal computer. Official Notice is taken the personal computers can read optical discs. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the personal computer produce the data signal from the disc.

Allowable Subject Matter

5. Claims 5, 12, and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: Prior art fails to teach or fairly suggest an output circuit and method comprising: further comprising amplifying the signal voltage of the output port when it is determined

Art Unit: 2621

that the output port is not electrically connected to the output cable, and comparing whether the amplified signal voltage of the output port is larger than a predetermined detecting threshold, then determining whether the output port is electrically connected to the output cable according to the comparison result.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heather R. Jones whose telephone number is 571-272-7368. The examiner can normally be reached on Mon. - Thurs: 7:00 am - 4:30 pm, and every other Fri.: 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

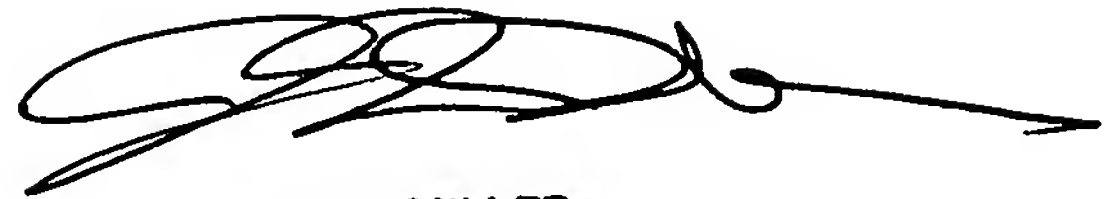
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/708,461
Art Unit: 2621

Page 8

Heather R Jones
Examiner
Art Unit 2621

HRJ
October 1, 2007

A handwritten signature in black ink, appearing to read 'J. Miller', with a long horizontal stroke extending to the right.

JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600